

Group	623 – Polyester High Durable Matt
Curing	min: 180°C @ 20' to 30' max: 200°C @ 10' to 20'
Surface	Very good appearance and levelling
Brilliance	25 - 35 @ 60°
Approvals	QUALICOAT (P-1223) / GSB Florida 3 Quality (licence 152k)

PRODUCT DESCRIPTION

A matt TGIC-free thermosetting polyester powder coating featuring excellent resistance to UV radiation and outdoor weathering.

Formulated on superdurable resins the PE/P/HDM range was designed to give enhanced protection to aluminium components used in architecture and for coating galvanised steel. Approved to GSB Master Quality specification (licence 152k) and QUALICOAT class 2 category 1 (licence P-1223).

Due to its high level of durability PE/P/HDM is particularly recommended for exterior coating in aggressive tropical environments.

Storage Life:

Store at temperatures lower than 30°C. Storage life in original package: 24 months.

CHARACTERISTICS

Spec. Gravity (kg/l): 1,25 – 1,60
DFT (micron): 60 - 80
Theoretical Coverage @60um: 13 m²/kg

Recommended dry film thickness:
60 - 80 µm

Reaction To Fire EN 13501-1

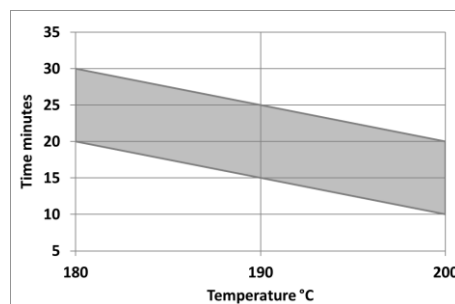
Classification: A2-s1, d0

APPLICATION

Suitable for automatic and manual electrostatic application. Please contact your Sherwin-Williams representative to discuss tribo-static application.

Curing Cycle

Time	Substrate temperature
10 - 20 min	200°C
15 - 25 min	190°C
20 - 30 min	180°C



CHEMICAL RESISTANCE

Immersion testing for 48 hours at ambient temperature:

Chemical	Effect
hydrochloric acid 10 %	No change
Nitric acid 30 %	Effect matt, but washing off
Sulphuric acid 10%	No change
hydrogen peroxide 40 vv	No change
ammonium hydroxide 10%	No change
ammonium hydroxide 33 %	No change
sodium hydroxide 5%	No change
tartaric acid 5%	No change
citric acid 5%	No change
lactic acid 5%	No change
ethanol	No change
N-butanol	No change
petroleum ether	slightly softened

SUBSTRATE PREPARATION

The surface treatment should be chosen according to the type of substrate and the required performance.

The surface to be coated must be free from oxidation, oil, grease or any other form of contamination.

A good quality pretreatment process is recommended for optimum performance, certified products can be found via Qualicoat, GSB or Qualisteelcoat.

Final user should select the proper pretreatment based on corrosion resistance performance.

Where required, the corrosion resistance can be enhanced using a primer system.

Pretreatment		Substrate			
		Aluminum	Steel	Galvanized Steel	Metallized Steel
Chemical	Cr-free (Zr, Ti, Oxilanes or alternatives)	✓		✓	
	Pre-anodising	✓			
	Chromate	✓		✓	
	Phospho-chromate	✓			
	Iron phosphate		✓		
	Zinc phosphate		✓	✓	
	Nano-ceramic		✓		
Mechanical	Sand blasting		✓		
	Soft blasting			✓	✓
	Sweeping			✓	✓

PERFORMANCE DATA

A coated aluminum panel (ALQ-36), DFT 60 µm, stoving 20' @ 180°C satisfied the following requirements,

Gloss 60° :

25.0 – 35.0

UNI EN ISO 2813:2014

Buchholz indentation test:

more than 90

UNI EN ISO 2815

Erichsen cupping test (mm):

more than 5

UNI EN ISO 1520

Direct impact test (cm.Kg):

more than 25

ASTM D 2794; ISO 6272-2:2002

Reverse impact test(cm.kg):

more than 25

ASTM D 2794; ISO 6272-2:2002

Conical mandrel : Bend test

5 mm mandrel, no detachment

Crosscut adhesion (2mm) (GT):

Class 0

UNI EN ISO 2409

Acetic salt fog test:

according to

Qualicoat and GSB International

Requirements UNI ISO 9227

Resistance to humidity:

(Humidity test) 1000 hours

no blistering, infiltration from the cross of max 1mm

UNI EN ISO 6270-2:2005

Accelerated Weathering:

1000h Xenon-arc

≥ 90% gloss retention

According with Qualicoat cycle

(ISO16474-2)

CAUTION

FOR INDUSTRIAL SHOP APPLICATION

Thoroughly review product label and Safety Data Sheet (SDS) prior to using this product.

A Safety Data Sheet is available from your local Sherwin-Williams facility or distributor

Note: Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the user obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in user handling and methods of application which are not known or under our control, The Sherwin-Williams Company cannot make any warranties as to the end result.